सत्यमेव जयते

GUJARAT INSTITUTE OF DISASTER MANAGEMENT
BUILDING RESILIENCE

Training Workshop on
Regional Severe Weather and
Flash Flood Hazard Early Warning Mechanism

15 – 17 October, 2019

Program Note

Background

South Asia is home to about one fourth of the world's population and occupies only 3% of the global land area, making it both the most populous and the most densely populated geographical region in the world. SAARC region is among the most vulnerable regions of the world to hydro-meteorological hazards including floods, cyclones, droughts and extreme temperatures.

Climate, weather and hydrological hazards do not recognize national boundaries. Transboundary/regional programs and cooperation are essential for reduction of the loss of lives and damage to livelihoods when facing these hazards. The development and implementation of systems to provide early warnings for severe weather events such as cyclones and flash floods requires data and information sharing in real time, and coordination among the government agencies at all levels. Within a country, this includes local, municipal, provincial-to-national levels as well as regional and international entities involved in hydro-meteorological services and Disaster Risk Reduction (DRR). The National Meteorological and Hydrologic Services (NMHSs) is generally the authority solely responsible for issuing warnings for these hazards. However, in many countries, the linkages and interfaces between the NMHS and other agencies need to be strengthened. Therefore, there is a critical need to assess, strengthen, and formalize collaborations when addressing the concept of reducing risk and impacts from severe weather and floods.

The Sendai Framework for Disaster Risk Reduction: 2015–2030 (SFDRR) that was adopted by 187 nations (including all the SAARC Member States) aimed at the substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries. As outlined in the principles and priorities under SFDRR, a critical component of Disaster Risk Reduction (DRR) is to enable early action. One way to achieve this is through a well-functioning early warning system that delivers accurate, reliable and easy to understand warnings, in a timely manner, to authorized disaster managers and populations at risk to take necessary actions. Effective early warning systems involve four operational components viz. (1) Monitoring and Warning Service; (2) Risk Knowledge; (3) Dissemination and Communication; and (4) Response Capability; which requires close cooperation and coordination among all the agencies involved.

State-of-the-art technology and a perfect forecast will not save lives if the populations at risk are not informed in a timely manner or do not have plans and policies in place in advance to reduce impacts. Well-prepared communities remain vulnerable to these hazards if they do not have access to and understand information that provides the lead time needed to take necessary actions. Communications and warning/information dissemination are important attributes of a successful warning system as well as investment into building the capacity of forecasters and knowledge user. In addition, close coordination must occur between all sectors and between national and local governments for systems to function properly with clear lines of roles and responsibilities to avoid confusion and chaos during disasters. Important parts of this process are the systems that enable user feedback to periodically improve to address the needs of decision makers.

Considering the same, SDMC (IU) is organizing a training workshop with the aims to strengthen coordination and collaboration mechanisms from national to local levels for Severe Weather and Flash Flood Hazard Early Warning Systems. During the program various tools and facilities to enhance currently operational severe weather and flash flood early warning systems in various countries in support of delivery and communication of warnings for the DRR entities at the regional, national and local levels in order to reduce the loss of life and property will be demonstrated.

Objectives:

Overall, the capacity building program will provide an opportunity to:

- Provide an updated overview on different approaches used for severe weather prediction/ forecasting of rainfall in the region;
- Understand the role of agencies involved in severe weather early warning and their mechanisms in the SAARC region.
- Discuss the issues and challenges of hazard assessment and ways of risk communication amongst the stakeholders.
- Understand opportunity to develop simple prediction Mechanism using Climate Prediction Tool (CPT) for the region;

Targeted Audience

About 25 participants from the SAARC Member States working with National Meteorological and Hydrology Services, disaster management agencies and relevant departments are expected to be participated in the training workshop.

COURSE DELIVERY

The course will be delivered using modern learning techniques with an emphasis on interactive lectures, group exercises, field visits and group brainstorming. The course will be enriched by guest speakers who will host debates and discussions using their wealth of practical experience in the field to provide cutting-edge insights on Severe Weather and Flash Flood Hazard Early Warning Systems. Participants will also be encouraged to

share their experiences of end–to-end Early warning systems and dissemination techniques from their respective countries.

SAARC Disaster Management Centre (SDMC-IU)

SDMC (IU) has been set up at Gujarat Institute of Disaster Management (GIDM) Campus, Gandhinagar, Gujarat, India in November 2016, with a vision to be a Centre of Excellence for regional cooperation and specialised service delivery to Member States for Disaster Risk Reduction (DRR), Response and Recovery for Sustainable Development. Eight Member States, i.e. Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka are being served by the SDMC (IU).